CS 337E: Design for Globa Grand Challenges

06. Med-fi Prototype & Design Choices

Team Mango May 10, 2023

Team Mango

Homeschool Education



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Problem Space Solution

Problem Space + Solution Overview

All students deserve access to a quality education.

Not all homeschooling parents have the resources or experience to provide such an education, leading to unequal outcomes during schooling and later in life.



We want to level the playing field and provide resources for homeschooling parents to be better equipped and more empowered in their teaching, for their kids.

Mission Statement

Value Proposition

Mission Statement



Our mission is to **empower and equip parents** as they seek to create engaging and inspiring learning environments at home.

Value Proposition



1. Personalized Feedback Solutions:

- a. Live lesson tracking and generated reports to help parents tailor feedback strategies to their child's individual needs
- b. Actionable insights and recommendations

2. Empowerment and Confidence:

a. Through insights on live lessons and simulations, gain experience and confidence in teaching

3 Tasks

Low-fi Tasks

Simple



Sign-up and find the "Tip of the Day"

Moderate



Record a live lesson and view generated feedback

Complex



Participate in teaching and feedback simulation

Low-fi Tasks

Feedback: Practice isn't the best use of time

"in terms of parent wanting to use time most efficiently, want to get certain amount of teaching done today" – P2

Simple



Sign-up and find the "Tip of the Day"

Moderate



Record a live lesson and view generated feedback

Complex



Participate in teaching and feedback simulation

Med-fi Tasks

Feedback: It's good to look back on feedback "[As a homeschooling parent, your] life is very integrated. It's go go go. You don't often take time to sit, pause, and look back at what you did. This encourages and forces looking back." – P1

Simple



Sign-up and find the "Tip of the Day"

Moderate



Record a live lesson and view generated feedback

Complex



Access a previous report

Design System

Introducing nurturEd



Design Idea

We support homeschooling parents with a crucial teaching process: **feedback.** With nurturEd, we want to help them nurture their students – **supporting growth every step** of the way.



nurturEd

In line with this theme of nurturing growth, the colors we chose were:

- Mint
- Green
- Teal
- Coral (accent)
- Yellow (accent)

nurturEd

Colors



Typography

nurturEd

nurturEd

nurturEd

Buttons





ALTERNATE

Icons

Choose a few key icons (You don't















Major Design Changes

Navigation Bar Update

P4: "A little confused about chat icon"
P1: "what is this [button] and how can I use it"

Changes:

- Focused on important features
- Intuitive icons



Profile Leslie Knope (Non-education) (3 kids) **History and reports** Sun, Feb 29 Photosynthesis Student 1 Mon, Jan 18 Water Cycle Student 2, Student 3 SEE MORE >> Saved Tips Sun. Feb 29 Provide positive reinforcement! Reinforce your child's positive behavior and encourage them with... Mon, Jan 18 Be flexible. Be willing to modify your approach if something isn't working. Try different strategies... SEE MORE >>

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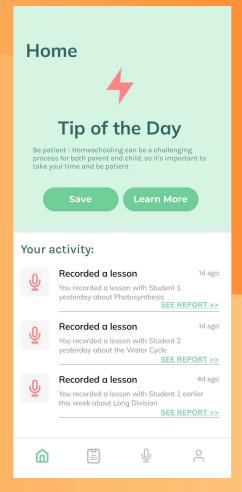
Tip of the Day

P1: "I want to learn more about the tip of day" P4: *Tried to click record before clicking out of tip*

Changes:

- Lasting tip, not pop up
- Added ways to interact:
 Save, Learn More, saved tips





Lesson Report

P3: "I wish I could ask the AI, 'What would you tell them?'" P4: "...[the report] could give more examples"

Changes:

- More interactive, parents can ask questions
- Ensure that there is both positive and negative feedback



← Lesson Report

Photosynthesis

 Student:
 Student 1
 Mon, 5/8/23

 Instructor:
 Parent 1
 12:40 PM

 43 min.
 43 min.

In this lesson, Parent 1 taught Student 1 about photosynthesis. I have generated a report on how it went.

To start, you did a good job of...

Billy seemed to understand..., but he had multiple questions about... I recommend you review those topics.

I have a few suggestions on your instruction:

 Try to ask a few more question about Billy's understanding.

Do you have any questions about the report or the lesson?

What is a question I should've asked?

You could ask: "What is the name of the compound that makes plants green?"



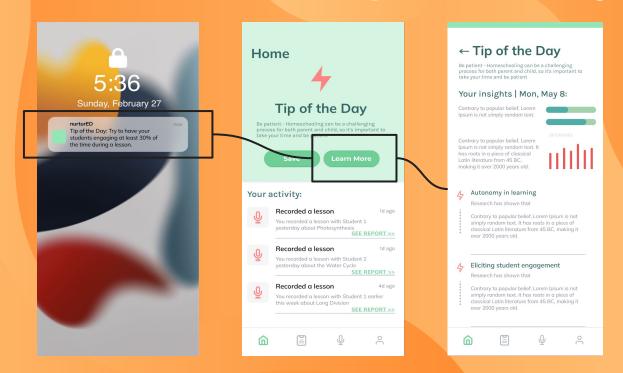






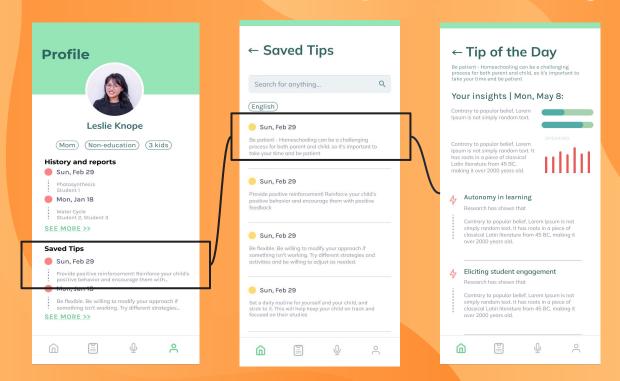
Med-fi Prototype

Simple Task: Access tip of the day



Flow 1: from notification + home screen

Simple Task: Access tip of the day

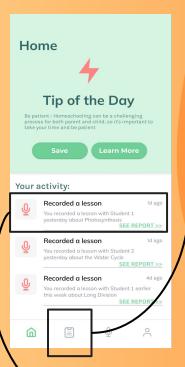


Flow 2: from profile + saved tips

Moderate Task: Record a live lesson



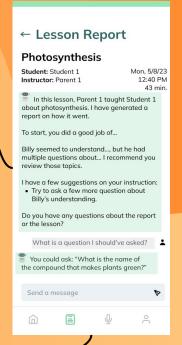
Complex Task: Analyze a previous report











Prototype Overview

PROS

Prototype mockup Customizing design Clickable prototype Easy to collaborate



CONS

Consistency was sometimes difficult Broken links

Creating content Generating feedback



Content needs editing

TOOLS

Free icons



Difficult to find some icons

Limitations

- No real Al interaction
 - Interviewer-generated feedback using Al
- No child feedback included
- Difficult to test real usage



Will the users who most need feedback help actually opt to use this app?

Trade offs

- Removed practice sessions
 - Some parents may have used
- Mobile vs web
 - Difficult to fully engage with quantity of information
 - Flexibility of recording on-the-go
- Text heavy screens
 - Quantity and importance of information

Wizard of Oz



Simple Task

- Tips and learn more are hard coded, not generated
- Saving doesn't actually update the server

Moderate Task

- Recording will be done by interviewer, not in the prototype
- Edit/Delete/Upload doesn't actually do anything on a server

• Complex Task

- Question/interaction with AI agent has been hardcoded
- We would provide a response to a question that a parent asks (not connected to ChatGPT or other LLM)
- Search feature, filter no backend to do real data segmenting

Thank you!

Questions? Feedback?

Summary

nurtured

- With nurtured, we want to help parents nurture their students supporting growth every step of the way.
- Green for growth!
- Tasks
 - Simple: Access tip of the day
 - Moderate: Record a live lesson
 - Complex: Analyze your report
 - Changed complex task based on feedback from interviews

Appendix

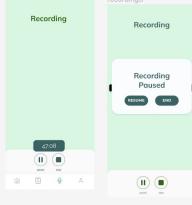
Med-Fi Prototype Link

https://www.figma.com/file/oCOuGJZPxVFXkWoMF WCuvR/CS377E?type=design&node-id=284-23742

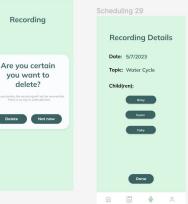
Med-fi Prototype Iteration / Other Screens

Moderate Task: Record a live lesson

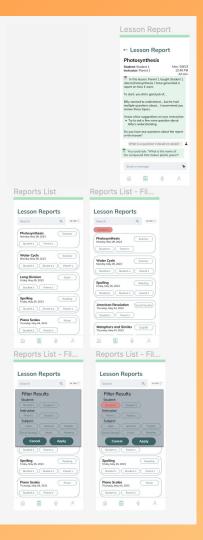




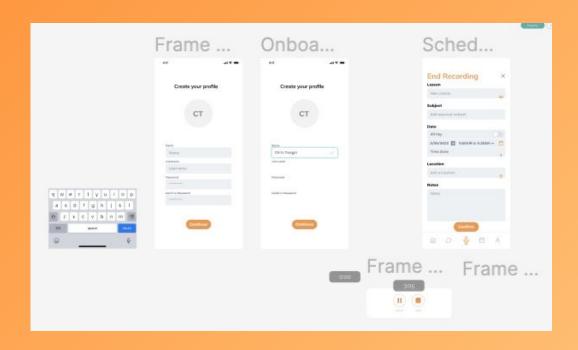




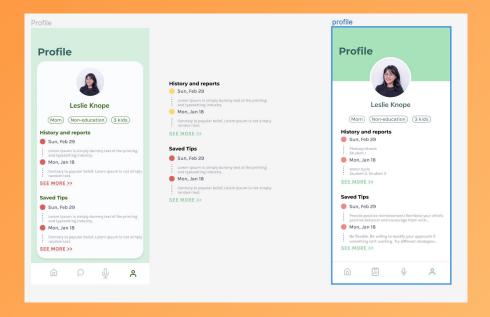
Complex Task: Analyze lesson report



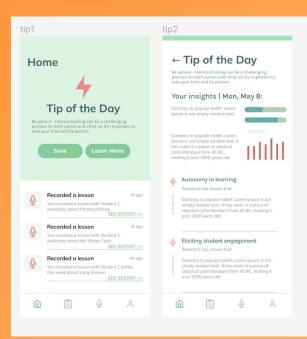
Onboarding

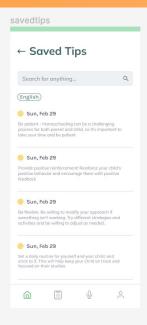


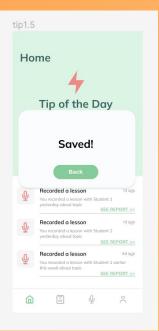
User Profile



Tip of the Day

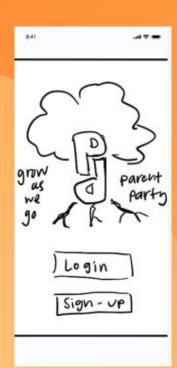






Low-fi Prototype

1: Tip of the Day (simple)



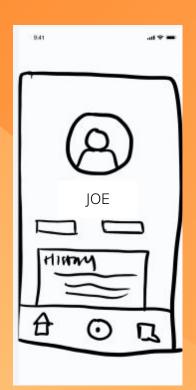




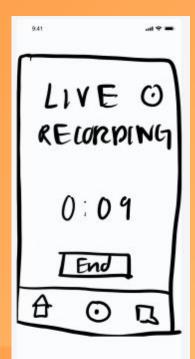




2: Live Recording (moderate)



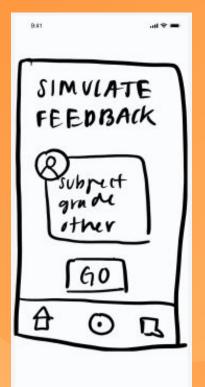


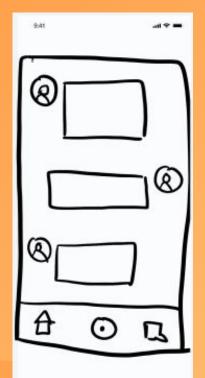


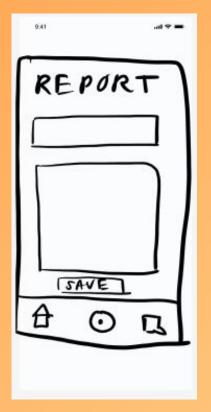


3: Feedback Simulator (complex)









Low-Fi Results

- 1. Simulation took too long
- 2. Concerns about privacy with recording
- 3. Parents appreciated having a consolidated resource would like as much streamlining as possible
- 4. Liked live use case can take it on the go
- 5. Audio recording does not capture visual aid use
- 6. Having examples of "good" teaching and feedback would be nice

Low-Fi Key Insights

- 1. Time is a key resource: no time for the simulation
- 2. Privacy concerns: ability to edit input before sending
- 3. Al is non-threatening: no pressure of judgment
- 4. Student feedback matters: include them in the process
- 5. Reports help parents to take the time to reflect
- 6. Proxy for expensive Teacher Ed programs
- 7. Building confidence leads to self-efficacy

"(as a homeschooling parent)
Your life is very integrated. It's
go go go. You don't often
take time to sit, pause, and
look back at what you did.
This encourages and forces
looking back." – P1